

## **A Social Marketing Campaign to Promote Low-fat Milk Consumption in an Inner-City Latino Community**

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The proposal by Mr. Wechsler and Mr. Wernick won first prize in the competition for the 1991 Secretary's Award for Innovations in Health Promotion and Disease Prevention.

Both are doctoral students at Teachers College, Columbia University, in the Department of Health Education. They are associated with the Washington Heights-Inwood Healthy Heart Program, where Mr. Wechsler is Program Director and Mr. Wernick is Community Health Educator.

The competition is sponsored by the Department of Health and Human Services and is administered by the Health Resources and Services Administration in cooperation with the Federation of Associations of Schools of the Health Professions. Proposals were judged on the innovativeness of the approach to health promotion or disease prevention, the feasibility of the approach with regard to implementation of the project, and the potential impact on a community or target population.

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### **Synopsis .....**

*The authors proposed the Lowfat Milk Campaign, a multifaceted social marketing campaign to promote the use of low-fat milk in the Washington Heights-Inwood neighborhood of New York City,*

*a low-income, inner-city, Latino community. The campaign was designed for implementation by the Washington Heights-Inwood Healthy Heart Program, a community-based cardiovascular disease prevention agency. The first phase of the campaign began in November 1990. A followup phase for the period 1991-92 is in progress.*

*The campaign focuses on a clear, relatively easily accomplished behavioral change, a switch by consumers of whole milk to low-fat milk, which may significantly reduce the fat consumption of persons in such a population, particularly children. The campaign strategy featured a mix of traditional health education methods, intensive local information media publicity, and innovative marketing techniques. In addition to increasing consumer demand for low-fat milk, the campaign successfully promoted institutional changes that are expected to facilitate healthy dietary choices in the future by members of the study population. Schools and other institutions that serve milk have been persuaded to begin offering low-fat milk in addition to, or instead of, whole milk.*

*An essential component of campaign strategy was building support from key community organizations and leaders. Significant assistance was provided by the local school district, parents associations, churches, newspapers, radio stations, fraternal organizations, and a coalition of child care agencies. The campaign demonstrates a cost-effective and culturally sensitive approach to promoting important cardiovascular health behavior changes by an underserved population.*

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**C**ARDIOVASCULAR DISEASE KILLS nearly a million Americans a year, almost as many as all other causes of death combined (1).

Cardiovascular disease is the leading cause of death in the Washington Heights-Inwood neighborhood of New York City, with heart and cerebrovascular disease accounting for approximately 39 percent of the community's deaths (2). Washington Heights-Inwood is located on the northern tip of Manhattan and has a population of about 200,000 (3). A large majority of its residents are low-income (4) Latinos (3), with recent immigrants

from the Dominican Republic forming the largest subgroup (5).

High dietary fat consumption is one of the leading behavioral risk factors for cardiovascular and other chronic diseases (6). Studies have shown that coronary atherosclerosis begins in childhood and is affected by high blood cholesterol levels (7). The primary strategy for reducing cholesterol levels is dietary change, that is, reducing the intake of total fat, saturated fat, and dietary cholesterol (8). Studies have found that children in the United States consume excessive amounts of fat (9, 10). A

number of expert panels have called for a reduction in fat intake among children (7, 11-14). Modifying fat consumption in childhood is important because nutrition habits acquired early in life may persist into adulthood.

Dairy products are an important part of a balanced diet, providing nutrients needed for developing and maintaining teeth, bones, and muscles (15). However, milk and milk products have been identified as a leading contributor to total fat and saturated fat intake among children (16) as well as adults (17). A national survey of children ages 1-5 years found that nearly 40 percent of their saturated fat intake came from milk products (10). Switching from whole milk dairy products to low-fat dairy products is an important, safe, and relatively easy way for those older than 2 years to reduce fat in the diet. Experts believe that, while infants need the extra fat provided by whole milk dairy products, by 2 years of age children receive sufficient amounts of fat necessary for normal growth and development from other food sources (7).

Nationally, the consumption of low-fat milk has been increasing dramatically during the past 20 years, while whole milk consumption has been decreasing. Between 1970 and 1990, annual sales of whole milk dropped by almost 50 percent (18). During the same period, low-fat milk sales have increased by more than 400 percent, and skim milk sales have more than doubled (18). This trend does not appear to be reflected among Latinos. A recent study of the food purchase patterns in a Latino community in California found the population to be much more likely to use whole milk than low-fat milk (19). A Texas study found that, compared with Anglos, Latinos are less likely to recognize dairy products as a key contributor of saturated fat to the diet (20).

In interviews Washington Heights-Inwood food store owners indicated that their Latino customers are much more likely to buy whole milk than low-fat milk. A recent study of Latino children in Washington Heights-Inwood found that whole milk was the single largest source of saturated fat in the children's diets; it contributed 44 percent of the total reported saturated fat consumption (21). Basch and coworkers estimated that if the children in their sample substituted 1 percent low-fat milk for whole milk, they would reduce their percentage of calories consumed in the form of saturated fat by 25 percent, from 13.3 to less than 10 percent (21).

An important barrier to increasing consumption of low-fat milk is its relatively limited availability

in this community. Many residents buy their food from *bodegas* (small, Hispanic grocery stores), many of which do not stock low-fat milk. Most preschool programs, nonpublic schools, and after school centers reported serving only whole milk or almost exclusively whole milk.

## Project Objectives

We conceived the Lowfat Milk Campaign to encourage members of the community to change their preference for whole milk to low-fat milk. The immediate objectives of the campaign were

- to increase public awareness of low-fat milk, to create a more positive image for it, and to encourage its consumption locally;
- to accomplish long-term behavior change by persuading institutions that exclusively serve whole milk to begin offering low-fat milk in quantities equal to or more than whole milk; and
- to develop educational materials and strategies appropriate for promoting low-fat milk consumption and suitable for use in other inner-city, Latino communities.

## Methods


The Washington Heights-Inwood Healthy Heart Program is a community-based cardiovascular disease prevention agency funded by the Mary Lasker Heart and Hypertension Institute of the New York State Department of Health. The program is managed by Teachers College, Columbia University, under the direction of Charles E. Basch, PhD; by The Presbyterian Hospital in the City of New York under the direction of Rafael Lantigua, MD, and Steven Shea, MD; and by the Columbia University School of Public Health. Nutrition education is one of the program's major activities.

Our primary campaign objective was to change the milk consumption preference of the study population from whole milk to low-fat milk, because research showed that whole milk was the largest source of saturated fat in the diets of local children (21). We believed that this behavioral innovation would be relatively easy to adopt, since we could promote the positive concept of substituting an attractive product (low-fat milk), rather than focussing on the negative concept of eliminating a product (whole milk).

Latina mothers of children between the ages of 2 and 12 years were selected as the primary target audience, because they usually purchase a family's


**Figure 1. A 1-page flyer produced for the Lowfat Milk Campaign. Versions were produced in English and in Spanish and pretested with local mothers. About 25,000 copies have been distributed.**

## If You Are Over Two, Lowfat Milk Is Best for You




- Milk is good for you. But whole milk has a lot of fat that you and your children don't need. Eating too much fat can cause heart disease.
- Lowfat milk is better than whole milk, because it has all the vitamins and nutrition you need from milk - with less fat.
- Lowfat milk is best for *everyone over 2 years old*, including children, adults, senior citizens, skinny people, and people who want to lose weight. Only children under 2 years old should drink whole milk, because they need extra fat.
- Lowfat milk is made by taking the fat out of whole milk. No water or anything else is added to lowfat milk.


**There are 3 kinds of lowfat milk:**



**2% Lowfat** - tastes a lot like whole milk with a little less fat.




**1% Lowfat or 99% Fat Free** - tastes lighter than whole milk with a lot less fat.




**Skim** - no fat and a lighter taste that many people enjoy.

- You may be surprised at how much you and your children will like the taste of lowfat milk - **try it!** If your store doesn't sell lowfat milk, ask for it.

**Your children deserve a healthy start in life - Give them lowfat milk!**





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food. We believed that children in this age group were the heaviest consumers of milk. The challenge would be to get our messages across to mothers and to get them and their children to taste low-fat milk.

Through nutritional counseling activities, questions at educational presentations, and informal discussions, we found that many local residents had misconceptions about low-fat milk. They generally were not aware that

- Whole milk is a major source of dietary fat for children.
- There are low-fat alternatives to whole milk besides skim milk.
- Low-fat milk tastes different than skim milk (most people like low-fat milk when they try it).
- Low-fat milk is recommended for everyone older than 2 years.
- Low-fat and skim milk provide the essential


**Figure 2. The Spanish language version of the 1-page flyer produced for the Lowfat Milk Campaign and distributed widely across the community.**

## Si Tienes Más de Dos Años de Edad, Leche Baja en Grasa Debes Tomar



- La leche es buena para ti. Pero la leche regular tiene mucha grasa que tú niño y tú no necesitan. El ingerir mucha grasa puede causar enfermedad del corazón.
- La leche baja en grasa es mejor que la leche regular, porque tiene todas las vitaminas y el contenido nutricional que tú necesitas de la leche, pero con menos grasa.
- La leche baja en grasa es buena para **todas las personas mayores de dos años de edad**: niños, adultos, ancianos, personas delgadas, y personas que quieren bajar de peso. Solo los niños menores de dos años de edad deben tomar leche regular, porque ellos necesitan grasa extra en su dieta.
- La leche baja en grasa es simplemente leche regular a la cual se le ha sacado la grasa. No se le ha agregado agua ni ninguna otra cosa.


**Existen tres tipos de leche baja en grasa:**



**"2% Lowfat"** - tiene un sabor similar al de la leche regular con un poquito menos de grasa.




**"1% Lowfat" o "99% Fat Free"** - tiene un sabor más ligero al de la leche regular y con mucho menos grasa.



**"Skim"** - sin grasa y con un sabor ligero disfrutado por muchas personas.

- Te sorprenderás de como a ti y a tus niños les gustará el sabor de la leche baja en grasa - **pruébala!** Si tu bodega no vende leche baja en grasa, píde-la.

**Tus niños merecen un comienzo saludable. ¡Dales leche baja en grasa!**





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protein, vitamins, calcium, and other minerals provided by whole milk.

Many residents believed that low-fat milk was made by adding water to whole milk. Because this is done in some Latin American countries to reduce the cost of milk, the thickness of whole milk becomes a symbol of newfound prosperity for many immigrants.

Using these insights, we produced an easy-to-read, 1-page flyer and a colorful poster, both printed in English and Spanish. We pretested the messages and materials with local mothers. The pretesting led us to make several changes, the most significant being to develop a slogan believed to communicate our message effectively, "If You're Over Two, Lowfat Milk Is Best For You."

After repeat pretesting showed the print materials to be effective, we reproduced them (figures 1




Figure 3. A coupon redeemable at 23 local supermarkets and *bodegas*, good for 25 cents savings on a purchase of low-fat milk as part of the Lowfat Milk Campaign. About 10,000 bilingual coupons were distributed through churches, community-based organizations, schools, mailings, and in taste tests on the street.

Coupon Expires / Fecha de Vencimiento: 11/30/90

**Save on**  
**Lowfat Milk**

25¢

**Ahorre en**  
**Leche Baja**  
**en Grasa**






2% Lowfat
1% Lowfat
Skim

Consumer: This coupon good only at the stores listed on the back.  
Consumidores: Este cupón solo es válido en los supermercados o bodegas mencionados en la parte de atrás.

Participating Stores / Los Supermercados y Bodegas Participantes

**Acogedor Cibao:** 1557 St. Nicholas Ave.  
**Associated:** 2050 Amsterdam Ave., 4776 Broadway, 1510 St. Nicholas Ave.  
**A&P:** 4211 Broadway, 4918 Broadway, 592 Ft. Washington Ave.  
**Grocery Inc.:** 1247 St. Nicholas Ave. / **Inwood Deli:** 4986 Broadway  
**Johnny & Ray Supermarket:** 4161 Broadway  
**Last Stop:** 1856 St. Nicholas Ave. / **Los 3 Galleguitos:** 151 Dyckman St.  
**Los 3 Ojos Supermarket:** 1279 St. Nicholas Ave.  
**Met Foods:** 3871 Broadway, 1331 St. Nicholas Ave.  
**Núñez Grocery:** 4099 Broadway  
**Plaza Dominicana:** 414 Audubon Ave.  
**Pioneer:** 1975 Amsterdam Ave., 72 Nagle Ave.  
**Sloan's:** 4037 Broadway / **UMS Grocery:** 1222 St. Nicholas Ave.  
**Xtra Jumbo:** 96 Sherman Ave. / **Xtra Values:** 1568 St. Nicholas Ave.




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Figure 4. The Lowfat Milk Label Collection Contest activated community organizations to educate their members about low-fat milk. Organizations were challenged to collect low-fat milk labels, with a TV-VCR as the prize. Nine organizations participated, and an adult education center won.

Announcing the Healthy Heart

## Lowfat Milk Label Contest

**Win a**  
**Television-VCR**



The community organization in Washington Heights-Inwood that collects the most lowfat milk labels during November 1990 wins.

**Here's how to participate:**


- Call the Healthy Heart Program at 212-923-4299 to register your organization. All organizations in **Community District 12** - community centers, churches, synagogues, schools, etc. - are eligible. (Individuals are not eligible.)
- Teach your members how important it is to choose either 2% lowfat, 1% lowfat, or skim milk instead of whole milk. You can get educational flyers from the Healthy Heart Program.
- Collect, keep, and count nutrition labels (or caps) from lowfat milk containers. You need to count the number of labels you have by size to determine how many contest points your organization gets. Here's how points are earned:
 

**1 point:** label from 1/2 pint, pint, or quart container of lowfat milk


**2 points:** label from a half gallon container of lowfat milk

**4 points:** cap or label from a gallon container of lowfat milk

To win, your organization must earn at least 500 points.
- All labels must be collected by November 30th. Labels and counts will be picked up by the Healthy Heart Program soon after.



Washington Heights-Inwood  
 Healthy Heart Program  
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and 2), along with a heart-shaped refrigerator magnet with the campaign slogan. The materials were distributed widely across the community in November 1990. Posters were placed at 62 key locations, including 6 churches, 15 schools, 7 preschool programs, 4 adult education programs, 15 community service programs, and 15 stores.

A total of about 25,000 low-fat milk flyers were distributed, including 1,350 through churches, 1,000 in preschool programs, 2,000 by adult education programs, 2,400 by community service programs, and 2,100 by stores. Six hundred were mailed to women between the ages of 18 and 44 years who had participated in previous agency activities. Fifteen thousand were distributed to parents through elementary schools, and 1,200 were passed out on the street.

In addition to print material dissemination, Phase I of the Lowfat Milk Campaign used presen-

tations, taste tests on busy streets, media publicity, distribution of discount coupons, and a contest among community organizations to collect the most low-fat milk labels.

Presentations were made in November 1990 at 14 organizations to 514 persons. Each presentation included low-fat milk taste tests, which powerfully reinforced the learning objectives. Special taste tests were conducted at two key neighborhood intersections and outside six schools at 3 o'clock when mothers came to pick up their children. More than 1,000 people tasted low-fat milk, with most of them saying it was the first time they had tried it. The response was overwhelmingly positive.

We produced press releases and public service announcements that helped generate coverage in the Spanish language media. Public service announcements were aired repeatedly on the three most popular Spanish radio stations in New York

City, with an estimated audience of more than 750,000. Five newspapers, with a combined circulation of 190,000, covered various aspects of the campaign, printing eight long articles with photographs and two brief articles. The campaign was covered on local cable television shows.

We recruited the managers of 23 local supermarkets and *bodegas* to redeem coupons that we designed and produced (figure 3). The coupons were worth 25 cents toward the next purchase of any container of low-fat milk during the month of November 1990 at the participating stores listed on the back of the coupon. Ten thousand bilingual coupons were distributed through churches, community-based organizations, schools, by mailings to participants in previous agency activities, and in taste tests on the street. Coupons were color- and number-coded to allow for an analysis of their redemption according to the channel of distribution. About 200 coupons were redeemed, a rate comparable with that of some commercial marketing coupon campaigns.

While the other campaign components were intended to influence consumer demand directly, the Lowfat Milk Label Collection Contest activated community organizations to educate their members about low-fat milk above and beyond our own efforts. We challenged community organizations to collect low-fat milk labels, with the one that collected the most getting a TV-VCR (figure 4). Nine organizations participated, and an adult education center won. A ceremony to present special citations to all participating organizations and the grand prize to the winners received excellent coverage in the New York City Spanish language information media. A day care center subsequently used our contest flyers to have a low-fat milk label collection contest among its parents with the prize being a radio.

Phase II of the campaign, which began in December 1990 and is continuing, builds on the increased public awareness generated by our November efforts. The major focus of Phase II is to persuade local institutions that currently serve only whole milk to begin offering low-fat milk. Through a telephone survey of all child care centers, after school programs, nonpublic schools, and senior citizen centers, we found that 46 of 54 institutions (85 percent) served only whole milk or almost exclusively whole milk. The survey did not include public schools, which are required by their participation in the National School Lunch Program to offer both low-fat and whole milks.

We developed a 1-page "Rationale for Serving

Lowfat Milk at Schools and Preschools," along with a packet of supporting documents. These materials were distributed at a meeting of the Washington Heights-Inwood Early Childhood Coalition and to various school principals and child care center directors. We continue to make presentations with taste tests at local community organizations, targeting those centers that serve only whole milk.

As of September 1991, we have convinced seven institutions to offer low-fat milk, and all now offer low-fat milk only. The institutions serve milk to about 1,200 children on a daily basis. They include four day care or preschool programs, two after school programs, and one parochial school. We expect other organizations to change their milk policies in the near future as a result of our educational efforts.

During Phase II of our campaign, we continue to influence consumer demand for low-fat milk by

- organizing additional street taste tests;
- initiating the production of a brief video promoting low-fat milk to be shown at community events, in schools, and on cable television; and
- developing and implementing educational activities in schools to encourage students to select low-fat milk in their cafeterias.

One school-based activity is the Healthy Heart Carnival, with interactive games in which children compete for token prizes. Games that we created include Wheel of Cholesterol, Healthywood Squares, Nutrition Label Lotto, and Fish for Foods Your Heart Will Love.

## Project Significance

The significance of the project may be judged by these factors

- The campaign deals with an important nutrition problem in the community.
- The strategies and bilingual materials created for the campaign can be used to conduct similar campaigns in other communities.
- The program is a rare nutrition education campaign directed to an inner city, low-income, Latino population. We demonstrated the importance of using multiple educational approaches, including social marketing techniques.
- The effort has resulted in long-term, demonstrable institutional changes that will improve the nutrition habits and practices of children in the Washington Heights-Inwood community.

## Summary of Evaluation Methods

Formative evaluation included documenting participation in presentations and taste tests, distribution of materials, coupon distribution and redemption, organizational participation, and media coverage. For summative evaluation, we have tracked changes in institutional milk policies. We will soon be conducting a survey of *bodegas* to see if our campaign has led to an increase in the availability of low-fat milk in the community. We are exploring ways to assess postcampaign changes in low-fat milk sales.

## Budget Estimate

Costs of the campaign were minimal because of the labor contributed by volunteers and the value of in-kind donations. Low-fat milk and low-fat or nonfat cookies for taste tests during Phase I were donated by businesses, and the contest prize was donated by a local fraternal organization. All contributors received extensive publicity. The principal out-of-pocket cost was \$3,120 for printing campaign flyers, posters, coupons, and magnets. Other costs included

- \$50 paid to stores for the redeemed coupons,
- About \$50 for miscellaneous supplies for taste tests (cups, ice, and napkins),
- \$150 for mailing flyers and coupons to participants at previous agency activities.

Considerable staff time and telephone use were required to coordinate and implement the campaign, but it is difficult to quantify the costs involved. The Lowfat Milk Campaign is a feasible, cost-effective way to address an important behavioral risk factor.

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